

REMARKS

Summary of the Amendment

Upon entry of the above amendment, claims 16 and 45 will have been amended and claims 51-53 will have been added. Accordingly, claims 2-13, 15-37, and 39-53 will be pending with claims 2, 16, 19, 21, 25, 37, 39, 42, 43, 45, 46 and 51 being independent.

Summary of the Official Action

In the instant Office Action, the Examiner objected to claim 45 as to a minor informality. Additionally, the Examiner rejected claims 2-13, 15, 16, 22-24 and 46 over the art of record. Finally, the Examiner indicated that claims 19-21, 25-37, 39-44 and 47-50 were allowed, that claims 17 and 18 contain allowable subject matter and would be allowable if presented in an independent form, and that claim 45 would be allowable if amended to overcome the formal objection. By the present amendment and remarks, Applicants submit that the rejections have been overcome, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

Acknowledgment of Allowability and Allowable Subject Matter

Applicant gratefully acknowledges the Examiner's indication that claims 19-21, 25-37, 39-44 and 47-50 are allowed.

Further, Applicant gratefully acknowledges the indication that claims 17 and 18 contain allowable subject matter and would be allowable if presented in an independent form that include the features of its respective base claim and intervening claim. However, at this time, Applicant is not presenting these claims in independent form.

Finally, Applicant gratefully acknowledges the indication that claim 45 contains allowable subject matter and would be allowable if amended to overcome the claim objection. While Applicant disagrees that the claim is improper, in an effort to advance prosecution, Applicant is herein amending claim 45 consistent with the Examiner's comments.

Accordingly, Applicant requests that, in addition to claims 19-21, 25-37, 39-44 and 47-50, the Examiner confirm the allowance of claim 45 in the next official communication.

Traversal of Rejections Under 35 U.S.C. § 103(a)

1. *Over CHALON alone*

Applicant traverse the rejection of claims 2-13, 15, 22-24 and 46 under 35 U.S.C. § 103(a) as being unpatentable over US patent 1,925,917 to CHALON alone.

The Examiner acknowledged that CHALON discloses a belt which uses perforations to provide for drainage and therefore lacks disclosure to an impermeable belt. However, the Examiner opines that because the belt is likely formed before it is perforated, this

intermediate state of belt formation teaches the invention recited in the above-noted claims.

Applicant respectfully traverses this rejection and the Examiner's assertions and opinions. Notwithstanding the Office Action assertions as to what this document discloses or suggests, Applicant submits that no proper reading or modification of the above-noted document discloses or suggests, inter alia, a belt for a material web producing machine, comprising a plurality of long-chain strength supports composed of a metallic material and arranged to form interstices and *a filler at least partially filling the interstices to make said belt fluid impermeable*, wherein the belt supports a paper web in the web producing machine, as recited in independent claim 2, and inter alia, a belt for a material web producing machine, comprising a plurality of long-chain strength supports composed of a metallic material and arranged to form interstices and *a filler at least partially filling the interstices to make said belt fluid impermeable*, wherein said fluid impermeable screen is structured as a sealing belt for a dryer device to support a material web, as recited in independent claim 46.

Applicant acknowledges that CHALON discloses a belt for a paper press wherein the belt may be formed from rubber and may be reinforced with a metal web or wires (see page 1, lines 59-67). Moreover, Fig. 11 and the description thereof on page 1, lines 107-108, explains that the belt may be reinforced with wire. However, it is clear that CHALON relates to a belt which necessarily includes perforations 11. Nowhere in this document is there any apparent disclosure with regard to forming the belt without such perforations. Indeed, the

Examiner has identified no such disclosure.

Nor is Applicant persuaded by the Examiner's arguments that the belt would likely be formed initially without such perforations. The Examiner has identified no disclosure in this document in support of this assertion. Accordingly, it appears that this argument is based on speculation and not on what the document discloses or suggests. This is improper.

Applicant submits that, contrary to the Examiner's assertions, CHALON provides no disclosure or suggestion with regard to *a filler at least partially filling the interstices to make said belt fluid impermeable*, as recited in independent claims 2 and 46.

Thus, Applicant submits that the above-noted document fails to disclose or suggest the features recited in at least amended independent claims 2 and 46. Because no proper reading of the above-noted document discloses or suggests at least the above-noted features of the instant invention, Applicant submits that no proper modification of this document can render unpatentable the combination of features recited in at least independent claims 2 and 46.

Furthermore, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify any of the applied document in the manner asserted by the Examiner. Nor does the Examiner's opinion provide a proper basis for these features or for the motivation to modify this document, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claims 2

and 46 is not rendered obvious by any reasonable inspection of this disclosure.

Applicant directs the Examiner's attention to the guidelines identified in M.P.E.P section 2141 which state that "[i]n determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification."

In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

As this section clearly indicates, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)."

Moreover, it has been legally established that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d

1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references).

Additionally, it has been held that “[a] statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).”

Furthermore, Applicant submits that dependent claims 3-13, 15 and 22-24 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper reading of CHALON discloses or suggests, in combination: that the long-chain strength supports comprise a metal having a high thermal conductivity, as recited in claim 3; that the metal is one of stainless steel and bronze, as recited in claim 4; that the long-chain strength supports comprise filaments, as recited in claim 5; that the filaments comprise a metal, as recited in claim 6; that the long-chain strength supports comprise a substantially circular cross-section, as recited in claim 7; that the long-chain strength supports comprise a substantially rectangular cross-section, as recited

in claim 8; that the long-chain strength supports comprise a substantially square cross-section, as recited in claim 9; that the long-chain strength supports comprise a substantially oval cross-section, as recited in claim 10; that the long-chain strength supports comprise a polygonal cross-section, as recited in claim 11; that the long-chain strength supports comprise a variable cross-sectional shape along their lengths, as recited in claim 12; that the filler comprises a plastic, as recited in claim 13; that the fluid is a liquid, as recited in claim 15; that the belt comprises a screen as recited in claim 22; that the screen is flexible and formed of woven long-chain strength supports as recited in claim 23; and that the belt comprises an interwoven sheet of the long-chain strength supports as recited in claim 24.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection under 35 U.S.C. § 103(a) and indicate that these claims are allowable over the applied art of record.

2. Over MAJANIEMI alone

Applicant traverse the rejection of claims 2-6, 13, 15 and 22-24 under 35 U.S.C. § 103(a) as being unpatentable over US patent 4,482,430 to MAJANIEMI alone.

The Examiner essentially acknowledged that MAJANIEMI lacks any disclosure with regard to a plurality of long-chain strength supports composed of a metallic material. However, the Examiner asserts that it would have been obvious to substitute the disclosed

belt support structure for one which has "an interconnecting structure of metallic wires".

Applicant respectfully traverses this rejection and the Examiner's assertions. Notwithstanding the Office Action assertions as to what this document discloses or suggests, Applicant submits that no proper reading or modification of the above-noted document discloses or suggests, inter alia, a belt for a material web producing machine, comprising *a plurality of long-chain strength supports* composed of a metallic material and *arranged to form interstices and a filler at least partially filling the interstices to make said belt fluid impermeable*, wherein the belt supports a paper web in the web producing machine, as recited in independent claim 2.

Applicant acknowledges that MAJANIEMI discloses a liquid-impermeable belt 2 for a press roll (see col. 3, line 19) wherein the belt may be formed from a compressible material and may be reinforced with a support structure 15, and wherein the support structure may be of a material such as steel (see col. 4, lines 10-19). However, the Examiner has identified no language in this document which discloses or suggests that the steel support structure is *a plurality of long-chain strength supports* composed of a metallic material and *arranged to form interstices*. To the contrary, the Examiner acknowledges that this feature is not disclosed, and instead relies on a bare assertion that it would have been obvious to use the recited strength support in the belt 2.

Thus, Applicant submits that the above-noted document fails to disclose or suggest

the features recited in at least amended independent claim 2. Because no proper reading of the above-noted document discloses or suggests at least the above-noted features of the instant invention, Applicant submits that no proper modification of this document can render unpatentable the combination of features recited in at least independent claim 2.

Furthermore, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify any of the applied document in the manner asserted by the Examiner. Nor does the Examiner's opinion provide a proper basis for these features or for the motivation to modify this document, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claim 2 is not rendered obvious by any reasonable inspection of this disclosure.

Furthermore, Applicant submits that dependent claims 3-6, 13, 15 and 22-24 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper reading of CHALON discloses or suggests, in combination: that the long-chain strength supports comprise a metal having a high thermal conductivity, as recited in claim 3; that the metal is one of stainless steel and bronze, as recited in claim 4; that the long-chain strength supports comprise filaments, as recited in claim 5; that the filaments comprise a metal, as recited in claim 6; that the filler comprises a plastic, as recited in claim 13; that the fluid is a liquid, as recited in claim 15; that the belt

comprises a screen as recited in claim 22; that the screen is flexible and formed of woven long-chain strength supports as recited in claim 23; and that the belt comprises an interwoven sheet of the long-chain strength supports as recited in claim 24.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection under 35 U.S.C. § 103(a) and indicate that these claims are allowable over the applied art of record.

3. Over SMITH with ROMANSKI and one of HOSE, MACBEAN, or PETERSON

Applicant traverse the rejection of claim 16 under 35 U.S.C. § 103(a) as being unpatentable over US patent 5,506,033 to SMITH in view of US patent 4,224,372 to ROMANSKI and further in view of US patent 2,718,791 to HOSE et al. or US patent 3,523,867 to MACBEAN or US patent 3,652,390 to PETERSON.

The Examiner acknowledged that SMITH discloses a belt which is impermeable only at its edges. The Examiner also acknowledged that SMITH lacks any disclosure to a plurality of long-chain strength supports composed of a metallic material. However, the Examiner asserts that it is well known to use drying belts made of a woven metal structure as exemplified by ROMANSKI. The Examiner also cited HOSE et al., MACBEAN and PETERSON as evidencing that is known to coat edges of a metal fabric.

Applicant respectfully traverses this rejection and the Examiner's assertions.

Notwithstanding the Office Action assertions as to what this document discloses or suggests, Applicant submits that no proper reading or modification of the above-noted document discloses or suggests, *inter alia*, a belt for a material web producing machine, comprising *a plurality of long-chain metal strength supports arranged to form interstices, a filler at least partially filling the interstices*, and beadlike protuberances located at peripheral regions of the belt, *wherein the belt is impermeable to a fluid*, as recited in independent claim 16.

Applicant acknowledges that SMITH discloses a belt whose edges are encapsulated with silicone rubber (see Abstract). However, the Examiner must acknowledge that this document relates to belt which is mostly permeable, i.e. only the edges are rendered impermeable. It is also clear that this document is entirely silent with regard to a belt that is impermeable to a fluid and/or *a plurality of long-chain metal strength supports arranged to form interstices*, as recited in independent claim 16. To the contrary, Fig. 1 shows a mostly permeable belt and the Examiner acknowledges that these features are not disclosed or suggested.

With regard to ROMANSKI, Applicant notes that this document discloses a woven dryer belt whose voids are at least partially filled with fillers (see col. 3, lines 2-9). However, the Examiner must acknowledge that this document relates to belt which is mostly permeable. Indeed, col. 3, lines 63-65, clearly indicates that "total permeability of the fabric is not removed". See also col. 4, lines 3-6 and 15-18. Thus, it is clear that this document is

entirely silent with regard to *a belt that is impermeable to a fluid in combination with a plurality of long-chain metal strength supports arranged to form interstices*, as recited in independent claim 16.

With regard to HOSE, Applicant notes that this document discloses a woven wire belt whose edges and seams are filled with plastic (see col. 1, lines 26-30). Applicant also notes that this document also indicates that "the plastic material [may fill] the interstices of the belt in any region to which it is applied." See col. 2, lines 1-3. However, the Examiner must acknowledge that this document does not specifically suggest that the entire belt can be made permeable. To the contrary, col. 2, lines 28-32, clearly indicates that "the elimination of open spaces through the belt in the reinforced region has no effect on the drainage of the belt as used in the machine" (emphasis added). See also col. 2, lines 28-32. Thus, it is clear that this document is entirely silent with regard to *a belt that is impermeable to a fluid in combination with a plurality of long-chain metal strength supports arranged to form interstices*, as recited in independent claim 16.

With regard to MACBEAN, Applicant notes that this document discloses a woven wire belt whose edges are filled with a thermoplastic (see col. 1, lines 61-63, col. 2, lines 6-11 and 40-41). However, the Examiner must acknowledge that this document does not specifically suggest that the entire belt can be made permeable. To the contrary, Figs. 1-3 clearly show that the belt is not made completely impermeable to a fluid. Thus, it is clear

that this document is entirely silent with regard to *a belt that is impermeable to a fluid in combination with a plurality of long-chain metal strength supports arranged to form interstices*, as recited in independent claim 16.

With regard to PETERSON, Applicant notes that this document discloses a woven brass belt with impermeable bands (see Abstract and col. 2, lines 55-73). However, the Examiner must acknowledge that this document does not specifically suggest that the entire belt can be made permeable. To the contrary, col. 3, line 50 to col. 4, line 4 clearly indicates that the "paper stock does drain through the permeable zones 32 of the fabric 10 between the bands 30". Thus, it is clear that this document is entirely silent with regard to *a belt that is impermeable to a fluid in combination with a plurality of long-chain metal strength supports arranged to form interstices*, as recited in independent claim 16.

Thus, Applicant submits that the above-noted documents fail to disclose or suggest the features recited in at least amended independent claim 16. Because no proper reading or combination of the above-noted documents disclose or suggest at least the above-noted features of the instant invention, Applicant submits that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 16.

Furthermore, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify any of the applied documents in the manner asserted by the

Examiner. Nor does the Examiner's opinion provide a proper basis for these features or for the motivation to modify these documents, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claim 16 is not rendered obvious by any reasonable inspection of these disclosures.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection under 35 U.S.C. § 103(a) and indicate that this claim is allowable over the applied art of record.

New Claims are also Allowable

Applicant submits that the new claims are also allowable over the applied art of record. Specifically, claims 51-53 recite a combination of features which are clearly not disclosed or suggested by the applied art of record.

Accordingly, Applicant respectfully requests consideration of these claims and further request that the above-noted claims be indicated as being allowable.

Application is Allowable

Thus, Applicant respectfully submits that each and every pending claim of the present invention meets the requirements for patentability under 35 U.S.C. §§ 102 and 103, and respectfully request the Examiner to indicate allowance of each and every pending claim of

the present invention.

Comments on the Examiner's Reasons for Allowance

In response to the Examiner's Reasons for Allowance in the instant Office Action, Applicant wishes to clarify the record with respect to the basis for the patentability of the claims in the present application.

In particular, while not disagreeing with the Examiner's indication that certain identified features are not disclosed by the references of record, Applicants further wish to clarify that the claims in the present application recite a combination of features, and the basis for patentability of these claims is based upon the totality of the features recited therein.

Authorization to Charge Deposit Account

If for any reason a check including the amount for any necessary fees is not associated with this file, the Commissioner is authorized to charge to Deposit Account No. 19 - 0089 the amounts identified herein for the missing check, as well as any necessary fees not explicitly identified, including any extensions of time fees required to place the application in condition for allowance by Examiner's Amendment, in order to maintain pendency of this application.

CONCLUSION

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicants' invention, as recited in each of the pending claims. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Respectfully submitted,
Dr. Gunter HALMSCHLAGER et al.


Neil F. Greenblum
Reg. No. 28,394

December 16, 2003
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191